

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009022**Date Inspected:** 13-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jha and Xu Yumin**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 2AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Longitudinal Stiffener between at PP 14.5 to PP 15 North and South side for Segment 2AW. Inspected 10% on a random basis and found the tension to be in general compliance. Bolt sizes used were M24 x 75 RC Set# DHGM240020 and final torque required is 600 N-m, M24 x 95 RC Set# DHGM240021 and final torque required is 540 N-m. Manual Torque wrench is been used with Sr. No. XQ2-584.

Lift 1 (West)

This QA Inspector measured and recorded for Misalignment between Plate Stiffeners and Floor Beam Web Slots in Segment 1AW and 1BW at PP 9.0, PP 9.5, PP 10, PP 10.5, PP 11.0, PP 11.5, PP 12.0 and PP 12.5.

Lift 1 (East)

This QA Inspector measured and recorded for Misalignment between Plate Stiffeners and Floor Beam Web Slots

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in Segment 1AW and 1BW at PP 9.5, PP 10.5, PP 11.5 and PP 12.5 and at PP 9.0, PP 10, PP 11.0, PP 12.0 and PP 12.5 misalignment measurement not performed as Temporary Sea Fasteners Structures being installed.

Segment 1AAW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) Stiffener which will be welded in transverse axis to I- Stiffener of Deck Panel. The weld joint is identified as OBW1 – 47/48. The welder is identified as 220064. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2133 and WPS-B-T-2134.

Segment 5BE and 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Cantilever, Bike Path side installed at PP 35 and weld joint being identified as OBE5-010. The welder is identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2133.

Segment 1AAW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) Stiffener which will be welded in transverse axis to I- Stiffener of Deck Panel. The weld joint is identified as OBW1 – 011 and 014. The welder is identified as 220063. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2133 and WPS-B-T-2134.

CB4

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Pipes to CB4 East side and weld joint being identified as SP209-001-166 and SP209-001-220 for CB4. The welder is identified as 220063 and 220064. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2131 and WPS-B-T-2134.

Segment 1AAW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) Stiffener which will be welded in transverse axis to I- Rib. The PCMK is identified as QGL-MQ-1360-A1-B Mis-drilled hole at Bottom Panel at PP 8.0 and welding was being performed against BWR 7300 Rev.0. The welder is identified as 048659. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G(4F)-Repair-1.

Segment 5BW

This Quality Assurance (QA) Inspector observed at 5BW between PP 32 to PP 34, Lower Chevron Splice plates faying surface to Box Section cleaning was in progress for North Side.

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Segment 5CW

This Quality Assurance (QA) Inspector observed at 5CW between PP 35 to PP 36, Lower Chevron Splice plates to Box Section A325 bolts installation was in progress.

Segment 5BE

This Quality Assurance (QA) Inspector observed at 5BE to 5CE at PP 35 Cantilever Installation being performed for checking the fitment with the segment.

Segment 1AW

This Quality Assurance (QA) Inspector observed mis-drilled holes at bottom panel being welded from external side.

Segment 1AAE to 1AE

This Quality Assurance (QA) Inspector observed Bottom Panel to Bottom Panel Flatness inspection was being carried out ZPMC. At location where Bottom Panel to Side Panel weld is getting connected.

Lift 3 (West)

This Quality Assurance (QA) Inspector observed at Lift 3 West Counter Weight side spot welding and grinding was in progress at Counter Weight installation area.

Segment 2BW

This Quality Assurance (QA) Inspector observed at Segment 2BW at PP 18 Cross Beam side for Edge Panel rain diverter plate MT test was being performed by ZPMC.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
